

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: Patent application of :
Graham McCreath, et al. : Group Art Unit:
: Not Yet Assigned
Serial No.: Not Yet Assigned :
: Examiner:
Filed: Concurrently Herewith : Not Yet Assigned
For: **Purification Of Fibrinogen From Fluids By** :
Precipitation And Hydrophobic :
Chromatography :

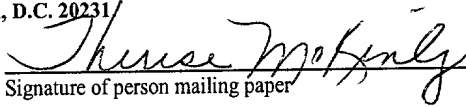
PRELIMINARY AMENDMENT

Commissioner for Patents
BOX PATENT APPLICATION
Washington, D.C. 20231

Dear Sir:

PRELIMINARY AMENDMENT

Kindly amend the above-identified patent application, without prejudice, as follows.

<p style="text-align: center;">CERTIFICATE OF MAILING UNDER 37 C.F.R. 1.10</p> <p>EXPRESS MAIL Mailing Label Number: <u>EL740190236 US</u> Date of Deposit: <u>5/22/2001</u></p> <p>I hereby certify that this correspondence, along with any paper referred to as being attached or enclosed, and/or fee, is being deposited with the United States Postal Service, "EXPRESS MAIL - POST OFFICE TO ADDRESSEE" service under 37 C.F.R. 1.10, on the date indicated above, and addressed to: Commissioner for Patents, Washington, D.C. 20231</p> <p style="text-align: center;"> _____ Signature of person mailing paper</p> <p style="text-align: center;">Therese McKinley _____ Type or print name of person</p>

In the Specification:

Page 1, after line 1, insert the following paragraph:

This is a continuation of co-pending international application PCT/GB/03193, having an international filing date of September 24, 1999, which claims the benefit under 35 U.S.C. 119(e) of the filing date of provisional application Serial No. 60/103,321, filed October 7, 1998, abandoned, and the filing date of provisional application Serial No. 60/103,319, filed October 7, 1998, abandoned.

In the Claims:

Cancel claims 24, 25 and 28.

Add the following new claim:

--29. A method for producing a fibrin adhesive or sealant as claimed in claim 21, comprising admixing fibrinogen with thrombin.--

Rewrite claims 9-13, 15, 17, 20, 22, 23 and 26 as follows. A mark-up of the amended claims as required by 37 CFR 1.121(c)(ii) is attached hereto as Appendix A.

9. (Amended) A method as claimed in claim 1, wherein the protease enzyme is plasmin and/or plasminogen.

10. (Amended) A method as claimed in claim 1, wherein the removal or partition of the desired protein is by precipitation.

11. (Amended) A method as claimed in claim 1, wherein the transfer of the protease enzyme into the whey phase of the milk is by the presence of lysine or a lysine analogue.

12. (Amended) A method, as claimed in claim 1, wherein the milk is whole milk, skimmed milk, or milk fraction.

13. (Amended) A method, as claimed in claim 1, wherein the milk is derived from a sheep, cow, goat, rabbit, camel, water buffalo, pig or horse.

15. (Amended) A method as claimed in claim 1, wherein the part purified protein is further purified by repeating the first step of each purification method.

16. (Amended) Transgenic fibrinogen, obtainable from milk, at least partly purified, having improved stability and/or increased integrity of the fibrinogen alpha chain.

17. (Amended) Transgenic fibrinogen obtainable by a method as claimed in claim 1.

20. (Amended) A fibrin adhesive or sealant containing fibrinogen as claimed in claim 16 or 17.

22. (Amended) A kit for a fibrin adhesive or sealant, comprising fibrinogen as claimed in claim 16 or 17 together with Factor XIII and/or Factor XIIIa as one component and thrombin and Ca^{++} as a second component.

23. (Amended) A method for producing a fibrin adhesive or sealant as claimed in claim 20, comprising admixing fibrinogen with thrombin.

26. (Amended) A method of surgery or therapy comprising placing a fibrin adhesive or sealant, as claimed in claim 20 or 21, on or within an animal or a body part of an animal.

Remarks

Claims 1-23, 26, 27 and 29 are pending in the application. The claims have been amended to reduce dependencies or to conform to US practice. New claim 29 is supported by original claim 23.

A paragraph has been inserted to cross-reference the earlier US applications to which benefit is claimed under 35 USC 119(e) and 120, in compliance with 37 CFR 1.78.

Respectfully submitted,

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APPENDIX A
Mark-up of Claims Amended

9. (Amended) A method as claimed in claim 1 [any one of claims 1, 2 or 6], wherein the protease enzyme is plasmin and/or plasminogen.
10. (Amended) A method as claimed in claim 1 [any one of claims 1, 2, 6 or 8], wherein the removal or partition of the desired protein is by precipitation.
11. (Amended) A method as claimed in claim 1 [any one of claims 1, 2, 6 or 8], wherein the transfer of the protease enzyme into the whey phase of the milk is by the presence of lysine or a lysine analogue.
12. (Amended) A method, as claimed in claim 1 [any one of claims 1-4, 6, 8 or 9, 10, 11 (when dependent on 1-4, 6 or 8)], wherein the milk is whole milk, skimmed milk, or milk fraction.
13. (Amended) A method, as claimed in claim 1 [any one of claims 1-4, 6, 8 or 9, 10, 11, 12 (when dependent on 1-4, 6 or 8)], wherein the milk is derived from a sheep, cow, goat, rabbit, camel, water buffalo, pig or horse.
15. (Amended) A method as claimed in claim 1 [any one of claims 1 to 4, or 9-14 (when dependent on 1-4)], wherein the part purified protein is further purified by repeating the first step of each purification method.
16. (Amended) Transgenic fibrinogen, obtainable from milk, at least partly purified, having improved stability [(in particular in respect of proteolysis)] and/or increased integrity of the fibrinogen alpha chain.
17. (Amended) Transgenic fibrinogen obtainable by a method as claimed in [any one of claims] claim 1 [to 16].

20. (Amended) A fibrin adhesive or sealant containing fibrinogen as claimed in claim 16 or 17 [any one of claims 16 to 19].

22. (Amended) A kit for a fibrin adhesive or sealant, comprising fibrinogen as claimed in [any one of claims 16 to 21] claim 16 or 17 together with Factor XIII and/or Factor XIIIa as one component and thrombin and Ca^{++} as a second component.

23. (Amended) A method for producing a fibrin adhesive or sealant as claimed in claim 20 [or claim 21], comprising admixing fibrinogen with thrombin.

26. (Amended) A method of surgery or therapy comprising placing a fibrin adhesive or sealant, as claimed in claim 20 or 21 [any one of claims 19 or 20], on or within an animal or a body part of an animal.